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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,352	02/27/2006	Albert Schomig	31698-1900	5048
71040 7590 02/03/2009 LUCE, FORWARD, HAMILTON & SCRIPPS 11988 EL CAMINO REAL, SUITE 200 SAN DIEGO, CA 92130				
EXAMINER GANESAN, SUBA				
ART UNIT		PAPER NUMBER		
3774				
MAIL DATE		DELIVERY MODE		
02/03/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,352

Applicant(s)

SCHOMIG ET AL.

Examiner

SUBA GANESAN

Art Unit

3774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/11/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,21-28 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,21-28 and 31-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/92)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/11/08 has been entered.

Response to Arguments

2. Applicant's arguments filed 12/11/08 have been fully considered but they are not persuasive. Applicant argues that Sirhan in view of Thompson lacks a surface roughened by sandblasting. This is not persuasive. Sirhan and Thompson both disclose rough surface stents. The use of sandblasting is considered to be a product by process limitation (see MPEP 2113).
3. Applicant has not provided any evidence that a sandblast roughened stent has structural distinctions from a stent roughened by any other means. However, Examiner has provided a reference teaching the use of Sandblasting as a means to roughen a stent surface.
4. Further note a new reference has been added to teach annealing of a stent surface.

Claim Objections

5. Claim 31 is objected to because of the following informalities: the word "coating" in line 2 appears to be a typo of ----coated----. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, 21-28, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirhan et al. (U.S. P.G. Pub. No.: 2002/0082679) in view of Thompson (U.S. Pat. No. 6,254,631), further in view of Callol et al. (U.S. Pat. No.: 6174329).

3. Sirhan discloses a stent system comprising a stent with a roughened exterior surface for coating with a drug (para 177). The drug can be tacrolimus (para 30) and the stent is a stainless steel material (para 177). The stent is delivered using a balloon catheter (para 143). Sirhan is silent as to whether both surfaces of the stent are roughened. However, Sirhan teaches the use of therapeutic agent on both the outer and luminal surface of a stent (para 25) as well as roughening as a means for coating a metal surface with a drug (para 177). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided both the outer and luminal surfaces of a stent with a roughened surface for the purpose of providing therapeutic agents on the luminal and outer surfaces.

4. Sirhan does not appear to disclose roughening the side surfaces in addition to the exterior stent surface. Thompson teaches the use of roughened inner and side stent surfaces (see abstract and fig. 4) for the purpose of preventing relative motion between the stent and the delivery balloon (col. 3 lines 10-46). Therefore it would have been obvious to one of ordinary skill in the art to modify the stent of Sirhan to include roughened inner and side surfaces as taught by Thompson for the purpose of allowing the stent to better grip the delivery balloon.

5. Sandblasting with sand, glass beads, or corundum is considered a product-by-process limitation that is not given patentable weight in the absence of distinguishing structure (See MPEP 2113).

6. Alternatively, Callol teaches the use of sandblasting as a suitable means for roughening a stent surface (col. 7 lines 23-27) in order to improve adhesion between layers. Therefore, if not inherent in Sirhan, it would have been obvious to utilize sandblasting as the means to roughen the stent surface for the purpose of improving adhesion between the stent surface and the therapeutic agent.

7. Claims 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirhan et al. (U.S. P.G. Pub. No.: 2002/0082679) in view of Thompson (U.S. Pat. No. 6,254,631) and Callol et al. (U.S. Pat. No.: 6174329), as applied supra, further in view of Jacobs et al. (U.S. Pat. No.: 6387123)

8. Sirhan in view of Thompson and Callol is explained supra. However, the combination lacks specific teaching for annealing the surface of the stent. Jacobs

teaches annealing the surface of a stent to improve layer adhesion (col. 5 lines 35-40) and creating a grain structure that increases the strength of the stent (col. 5 line 65- col. 6 line 2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have annealed the stent of Sirhan in view of Thompson and Callol as taught by Jacobs for the purpose of improving adhesive strength between layers and improving the strength of the stent.

9. Note that with respect to claims 37-38, it is considered inherent that sandblasting particles comprise sand and that the annealed exterior surface includes sandblasting particles, by virtue of the sandblasting used to roughen the stent.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUBA GANESAN whose telephone number is (571)272-3243. The examiner can normally be reached on M-F 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./
Examiner, Art Unit 3774
/William H. Matthews/
Primary Examiner, Art Unit 3774